

Nurses' perception of patient safety culture and its relationship with adverse events: a national questionnaire survey in Iran(Article)(Open Access)

- [Kakemam, E.^aEmail Author](#),
- [Gharace, H.^bEmail Author](#),
- [Rajabi, M.R.^cEmail Author](#),
- [Nadernejad, M.^dEmail Author](#),
- [Khakdel, Z.^{d,e}Email Author](#),
- [Raeissi, P.^fEmail Author](#),
- [Kalhor, R.^{g,h}Email Author](#)
- [View Correspondence \(jump link\)](#)

- ^aDepartment of Health Services Management, School of Management and Medical Informatics, Tabriz University of Medical Sciences, Tabriz, Iran
- ^bDistrict Health Center of Hamadan City, Hamadan University of Medical Sciences, Hamadan, Iran
- ^cDepartment Cardiology, Faculty of Medicine, Shahed University, Tehran, Iran
- ^dHealth Management and Economics Research Center, Iran University of Medical Sciences, Tehran, Iran
- ^eHealth Management and Economics Research Center, Isfahan University of Medical Sciences, Isfahan, Iran
- ^fDepartment of Health Services Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran
- ^gSocial Determinants of Health Research Center, Research Institute for Prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Qazvin, Iran
- ^hHealth Services Management Department, School of Public Health, Qazvin University of Medical Sciences, Shahid Bahonar Blv, Qazvin, Iran

[Hide additional affiliations](#)

Abstract [View references \(44\)](#)

Background: Patient safety culture is an important factor in determining hospitals' ability to address and reduce the occurrence of adverse events (AEs). However, few studies have reported on the impact of nurses' perceptions of patient safety culture on the occurrence of AEs. Our study aimed to assess the association between nurses' perception of patient safety culture and their perceived proportion of adverse events. Methods: A cross-sectional survey was carried out among 2295 nurses employed in thirty-two teaching hospitals in Iran. Nurses completed the Persian version of the hospital survey of patients' safety culture between October 2018 and September 2019. Results: Positive Response Rates of overall patient safety culture was 34.1% and dimensions of patient safety culture varied from 20.9 to 43.8%. Also, nurses estimated that the occurrence of six adverse events varied from 51.2–63.0% in the past year. The higher nurses'

perceptions of “Staffing”, “Hospital handoffs and transitions”, “Frequency of event reporting”, “Non-punitive response to error”, “Supervisor expectation and actions promoting safety”, “Communication openness”, “Organizational learning continuous improvement”, “Teamwork within units”, and “Hospital management support patient safety” were significantly related to lower the perceived occurrence at least two out of six AEs (OR = 0.69 to 1.46). Conclusions: Our findings demonstrated that nurses’ perception regarding patient safety culture was low and the perceived occurrence of adverse events was high. The research has also shown that the higher level of nurses’ perception of patient safety culture was associated with lowered occurrence of AEs. Hence, managers could provide prerequisites to improve patient safety culture and reduce adverse events through different strategies, such as encouraging adverse events’ reporting and holding training courses for nurses. However, further research is needed to assess how interventions addressing patient safety culture might reduce the occurrence of adverse events. © 2021, The Author(s).